LISTING OF CLAIMS

This listing of claims replaces all prior versions and listings of claims in the patent application.

Claims 1-11 (canceled).

Claim 12 (previously presented): An electronic commerce system comprising:

a client computer; and

a server computer;

the client computer and the server computer being interconnected by a public packet switched communications network;

the client computer being programmed to transmit to the server computer an order acceptance request comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

the server computer being programmed to process the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes embedded within each of the modular elements and examination of the modular elements of the discrete message individually protected by the cryptographic security codes, and, based on the processing of the order acceptance request, to transmit to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements;

wherein the client computer is programmed to receive the digital coupon, protected by a cryptographic security code, from another computer.

Claim 13 (previously presented): An electronic commerce system comprising:

a client computer; and

a server computer;

the client computer and the server computer being interconnected by a public packet switched communications network;

the client computer being programmed to transmit to the server computer an order acceptance request comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

the server computer being programmed to process the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes embedded within each of the modular elements and examination of the modular elements of the discrete message individually protected by the cryptographic security codes, and, based on the processing of the order acceptance request, to transmit to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements;

wherein the digital coupon is configured to be used by any coupon holder that possesses the digital coupon, and wherein the server computer is programmed to accept the digital coupon without regard to the identity of the coupon holder.

Claim 14 (previously presented): An electronic commerce system comprising:

a client computer; and

a server computer;

the client computer and the server computer being interconnected by a public packet switched communications network;

the client computer being programmed to transmit to the server computer an order acceptance request comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

the server computer being programmed to process the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes embedded within each of the modular elements and examination of the modular elements of the discrete message individually protected by the cryptographic security codes, and, based on the processing of the order acceptance request, to transmit to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements;

wherein the server computer is programmed to determine whether a coupon holder is authorized to use the digital coupon and to accept the digital coupon only if the coupon holder is authorized to use the digital coupon.

Claim 15 (previously presented): The electronic commerce system of claim 14 wherein the client computer is programmed to provide information to the server computer concerning identify of the coupon holder.

Claim 16 (previously presented): The electronic commerce system of claim 15 wherein the server computer is programmed to authenticate authority of the client computer by virtue of a two-way-authenticated SSL connection.

Claim 17 (previously presented): The electronic commerce system of claim 15 wherein the server computer is programmed to authenticate authority of the client computer using a basic authentication method.

Claim 18 (previously presented): The electronic commerce system of claim 15 wherein the server computer is programmed to authenticate authority of the client computer using a client certificate.

Claim 19 (previously presented): The electronic commerce system of claim 3 wherein the digital coupon contains a serial number to ensure that the digital coupon is used only once and the server computer is programmed to determine whether the digital coupon has been used previously and to accept the digital coupon only if it has not been used previously.

Claim 20 (previously presented): The electronic commerce system of claim 3 wherein the server computer is programmed to set at least one term of the order acceptance response based on whether the digital coupon is present in the order acceptance request.

Claim 21 (previously presented): The electronic commerce system of claim 20 wherein the at least one term of the order acceptance response is a price.

Claim 22 (previously presented): The electronic commerce system of claim 3 wherein the server computer is programmed to set at least one term of the order acceptance response based on whether the digital coupon in the order acceptance request is a particular type of digital coupon.

Claim 23 (previously presented): The electronic commerce system of claim 3 wherein the digital coupon is a gift certificate.

Claim 24 (previously presented): The electronic commerce system of claim 23 wherein the gift certificate comprises a serial number.

Claim 25 (previously presented): The electronic commerce system of claim 24 wherein the server computer is programmed to ensure that the serial number has been used only once by checking a database in which the serial number is stored.

Claim 26 (previously presented): The electronic commerce system of claim 23 wherein the client computer is programmed to display an icon of the gift certificate and to initiate the order acceptance request after a recipient of the gift certificate clicks on the icon.

Claim 27 (previously presented): The electronic commerce system of claim 26 further comprising a merchant computer, the merchant computer being programmed to respond to the recipient clicking on the icon by transmitting an order form to the client computer, the client computer being programmed to initiate the order acceptance request when the recipient fills in the order form.

Claim 28 (previously presented): The electronic commerce system of claim 23 wherein the client computer is a first client computer programmed to receive the gift certificate from a second client computer.

Claim 29 (previously presented): The electronic commerce system of claim 28 wherein the server computer is programmed to transmit the gift certificate to the second client computer, which in turn is programmed to forward the gift certificate to the first client computer.

Claim 30 (previously presented): The electronic commerce system of claim 29 wherein the gift certificate comprises a serial number and the server computer is programmed to create the serial number of the gift certificate before transmitting the gift certificate to the second client computer.

Claim 31 (previously presented): The electronic commerce system of claim 30 wherein the server computer is programmed to store the serial number in a database before transmitting the gift certificate to the second client computer, and is programmed, when it receives the gift certificate from the first client computer to ensure that the serial number has been used only once by checking the database in which the serial number is stored.

Claim 32 (previously presented): The electronic commerce system of claim 29 further comprising a merchant computer programmed to transmit the gift certificate to the server computer before the server computer transmits the gift certificate to the second client computer.

Claim 33 (previously presented): The electronic commerce system of claim 32 wherein the merchant computer is programmed to transmit the gift certificate to the server computer in the form of an order acceptance request that includes extension information indicating that the order acceptance request is a gift certificate.

Claim 34 (previously presented): An electronic commerce system comprising:

a client computer; and

a server computer;

the client computer and the server computer being interconnected by a public packet switched communications network;

the client computer being programmed to transmit to the server computer an order acceptance request comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

the server computer being programmed to process the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes embedded within each of the modular elements and examination of the modular elements of the discrete message individually protected by the cryptographic security codes, and, based on the processing of the order acceptance request, to transmit to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements;

wherein the cryptographic security codes are embedded within respective ones of the plurality of modular elements.

Claim 35 (previously presented): An electronic commerce system comprising:

a client computer; and

a server computer;

the client computer and the server computer being interconnected by a public packet switched communications network;

the client computer being programmed to transmit to the server computer an order acceptance request comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

the server computer being programmed to process the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes embedded within each of the modular elements and examination of the modular elements of the discrete message individually protected by the cryptographic security codes, and, based on the processing of the order acceptance request, to transmit to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of

modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements;

wherein the cryptographic security codes are digital signatures.

Claim 36 (previously presented): An electronic commerce system comprising:

a client computer; and

a server computer;

the client computer and the server computer being interconnected by a public packet switched communications network;

the client computer being programmed to transmit to the server computer an order acceptance request comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

the server computer being programmed to process the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes embedded within each of the modular elements and examination of the modular elements of the discrete message individually protected by the cryptographic security codes, and, based on the processing of the order acceptance request, to transmit to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by embedding cryptographic security codes within each of the modular elements;

wherein the cryptographic security codes are message authentication codes.

Claims 37-38 (canceled).

Claim 39 (previously presented): A method of processing order acceptance requests in an electronic commerce system, comprising a client computer and a server computer interconnected by a public packet switched communications network, the method comprising:

receiving at the server computer an order acceptance request transmitted by the client computer comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

processing the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes and examination of the modular elements of the discrete message individually protected by the cryptographic security codes; and

based on the processing of the order acceptance request, transmitting to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements;

wherein the client computer receives the digital coupon, protected by a cryptographic security code, from another computer.

Claim 40 (previously presented): A method of processing order acceptance requests in an electronic commerce system, comprising a client computer and a server computer interconnected by a public packet switched communications network, the method comprising:

receiving at the server computer an order acceptance request transmitted by the client computer comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

processing the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes and examination of the modular elements of the discrete message individually protected by the cryptographic security codes; and

based on the processing of the order acceptance request, transmitting to the client computer an order acceptance response based on the pre-programmed criteria, the order

acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements;

wherein the digital coupon is configured to be used by any coupon holder that possesses the digital coupon, the method further comprising accepting the digital coupon at the server computer is programmed without regard to identity to the coupon holder.

Claim 41 (previously presented): A method of processing order acceptance requests in an electronic commerce system, comprising a client computer and a server computer interconnected by a public packet switched communications network, the method comprising:

receiving at the server computer an order acceptance request transmitted by the client computer comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

processing the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes and examination of the modular elements of the discrete message individually protected by the cryptographic security codes; and

based on the processing of the order acceptance request, transmitting to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements;

further comprising the steps of determining whether a coupon holder is authorized to use the digital coupon and accepting the digital coupon at the server computer only if the coupon holder is authorized to use the digital coupon.

Claim 42 (previously presented): The method of claim 41 further comprising receiving information at the server computer provided by the client computer concerning identify of the coupon holder.

Claim 43 (previously presented): The method of claim 42 further comprising authenticating authority of the client computer, at the server computer, by virtue of a two-way-authenticated SSL connection.

Claim 44 (previously presented): The method of claim 42 wherein authenticating authority of the client computer is performed using a basic authentication method.

Claim 45 (previously presented): The method of claim 42 wherein authenticating authority of the client computer is performed using a client certificate.

Claim 46 (previously presented): The method of claim 37 wherein the digital coupon contains a serial number to ensure that the digital coupon is used only once, the method further comprising determining at the server computer whether the digital coupon has been used previously and accepting the digital coupon only if it has not been used previously.

Claim 47 (previously presented): The method of claim 37 further comprising setting, at the server computer, at least one term of the order acceptance response based on whether the digital coupon is present in the order acceptance request.

Claim 48 (previously presented): The method of claim 47 wherein the at least one term of the order acceptance response is a price.

Claim 49 (previously presented): The method of claim 37 further comprising setting, at the server computer, at least one term of the order acceptance response based on whether the digital coupon in the order acceptance request is a particular type of digital coupon.

Claim 50 (previously presented): The method of claim 37 wherein the digital coupon is a gift certificate.

Claim 51 (previously presented): The method of claim 50 wherein the gift certificate comprises a serial number.

Claim 52 (previously presented): The method of claim 51 further comprising ensuring that the serial number has been used only once by checking a database at the server computer in which the serial number is stored.

Claim 53 (previously presented): The method of claim 50 wherein the client computer displays an icon of the gift certificate and initiates the order acceptance request after a recipient of the gift certificate clicks on the icon.

Claim 54 (previously presented): The method of claim 53 wherein the electronic commerce system further comprises a merchant computer and wherein the merchant computer responds to the recipient clicking on the icon by transmitting an order form to the client computer, and wherein the client computer initiates the order acceptance request when the recipient fills in the order form.

Claim 55 (previously presented): The method of claim 50 wherein the client computer is a first client computer that receive the gift certificate from a second client computer in the electronic commerce system.

Claim 56 (previously presented): The method of claim 55 further comprising transmitting the gift certificate from the server computer to the second client computer, which in turn forwards the gift certificate to the first client computer.

Claim 57 (previously presented): The method of claim 56 wherein the gift certificate comprises a serial number and wherein the method further comprises creating the serial number of the gift certificate at the server computer before transmitting the gift certificate to the second client computer.

Claim 58 (previously presented): The method of claim 56 further comprising storing the serial number in a database at the server computer before transmitting the gift certificate to the second client computer, and when the server computer receives the gift certificate from the first client computer, ensuring that the serial number has been used only once by checking the database at the server computer in which the serial number is stored.

Claim 59 (previously presented): The method of claim 56 further wherein the electronic commerce system further comprises a merchant computer, the method further comprising receiving the gift certificate at the server computer from the merchant computer before transmitting the gift certificate from the server computer to the second client computer.

Claim 60 (previously presented): The method of claim 59 wherein the merchant computer transmits the gift certificate to the server computer in the form of an order acceptance request that includes extension information indicating that the order acceptance request is a gift certificate.

Claim 61 (previously presented): A method of processing order acceptance requests in an electronic commerce system, comprising a client computer and a server computer interconnected by a public packet switched communications network, the method comprising:

receiving at the server computer an order acceptance request transmitted by the client computer comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

processing the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes and examination of the modular elements of the discrete message individually protected by the cryptographic security codes; and

based on the processing of the order acceptance request, transmitting to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a

transaction that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements;

wherein the cryptographic security codes are embedded within respective ones of the plurality of modular elements.

Claim 62 (previously presented): A method of processing order acceptance requests in an electronic commerce system, comprising a client computer and a server computer interconnected by a public packet switched communications network, the method comprising:

receiving at the server computer an order acceptance request transmitted by the client computer comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

processing the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes and examination of the modular elements of the discrete message individually protected by the cryptographic security codes; and

based on the processing of the order acceptance request, transmitting to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements;

wherein the cryptographic security codes are digital signatures.

Claim 63 (previously presented): A method of processing order acceptance requests in an electronic commerce system, comprising a client computer and a server computer interconnected by a public packet switched communications network, the method comprising:

receiving at the server computer an order acceptance request transmitted by the client computer comprising a plurality of terms or conditions of a proposed offer for a purchase, the order acceptance request comprising a discrete message that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded

within each of the modular elements, at least one of the modular elements individually protected by a cryptographic security code being a digital coupon;

processing the order acceptance request based on pre-programmed criteria, including authentication of the cryptographic security codes and examination of the modular elements of the discrete message individually protected by the cryptographic security codes; and

based on the processing of the order acceptance request, transmitting to the client computer an order acceptance response based on the pre-programmed criteria, the order acceptance response comprising a discrete message transmitted during a negotiation phase of a transaction that includes a plurality of modular elements whose individual integrity is protected by cryptographic security codes embedded within each of the modular elements;

wherein the cryptographic security codes are message authentication codes.